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EXAMINER	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/729,771

Applicant(s)

DE GROOT ET AL.

Examiner

Thuy Dao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on May 10, 2007 has been entered.

2. Claims 1-37 have been examined.

### **Response to Amendments**

3. Per Applicants' request, claims 1, 16, 18, 21, and 26 have been amended.

### **Response to Arguments**

4. The Applicants are thanked for a thorough reply. Applicants' arguments have been considered but are moot in view of the new ground(s) of rejection.

### **Specification**

5. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (e.g., page 12, [0050]). See MPEP § 608.01.

Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code (for example, adding the angle brackets as - <http://www.ispe.org>- ).

### **Claim Rejections – 35 USC § 102**

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty

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defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-4, 6-14, 26-29, 31-34, and 36-37 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,754,885 to Dardinski et al. (art made of record, hereinafter "Dardinski").

**Claim 1:**

Dardinsky discloses *a method for enforcing a life cycle process in a source control system, comprising:*

*receiving a user-defined life cycle process having a plurality of states, each state having attributes (e.g., FIG. 45, col.52: 6-60; col.54: 58-64; col.58: 16-23);*

*receiving user-defined state transitions between said plurality of states (e.g., col.53: 32 – col.54: 38);*

*providing a change state function for a user to change a current state associated with an object to a next state associated with said object (e.g., col.61: 24 – col.62: 18),*

*said change state function verifying compliance with said user-defined state transitions (e.g., col.108: 5-15); and*

*providing version control for said object in said source control system (e.g., col.51: 59 – col.52: 14; col.55: 14-63).*

**Claim 2:**

The rejection of claim 1 is incorporated. Dardinski also discloses *said version control comprises: providing a check-in function; and providing a check-out function (e.g. col.53: 53 – col.54: 38).*

**Claim 3:**

The rejection of claim 1 is incorporated. Dardinski also discloses *said attributes include a fallback state (e.g., col.61: 24 – col.62: 18).*

**Claim 4:**

The rejection of claim 1 is incorporated. Dardinski also discloses *receiving user-defined security for said user-defined state transitions* (e.g., col.64: 12-53).

**Claim 6:**

The rejection of claim 4 is incorporated. Dardinski also discloses *said user-defined security includes which users have permission to make which state transitions* (e.g., col.64: 46 – col.65: 16).

**Claim 7:**

The rejection of claim 1 is incorporated. Dardinski also discloses *said object is a control strategy for a process control system* (e.g., FIG. 1, col.8: 23 – col.9: 20).

**Claim 8:**

The rejection of claim 7 is incorporated. Dardinski also discloses *said attributes include whether said control strategy is loadable to a controller* (e.g., FIG. 2, col.9: 21-51).

**Claim 9:**

The rejection of claim 1 is incorporated. Dardinski also discloses *receiving said user-defined life cycle process having said plurality of states, each state having attributes is performed through a user interface having an editable table, said table having state names as rows and attributes as columns and having cells indicating values for said attributes* (e.g., FIG. 12, col.16; 1-51).

**Claim 10:**

The rejection of claim 6 is incorporated. Dardinski also discloses *receiving user-defined state transitions between said plurality of states is performed through a user interface having an editable table, said table having state names as rows and column*

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*and having cells indicating which users have permission to make which state transitions (e.g., FIG. 53: col. 60: 7 – col.61: 15).*

**Claim 11:**

*Dardinski discloses a computer readable medium having executable instructions stored thereon to perform a method of determining permissions for actions with an object based on a state of said object, said method comprising:*

*receiving a request to perform an action with said object (e.g., FIG. 45, col.52: 6-60; col.54: 58-64; col.58: 16-23);*

*determining whether said object has ever been checked-in to a source control system (e.g., col.54: 10-38; FIG. 8);*

*determining whether said object is currently checked-in (e.g., col.56: 60 – col.57: 4; col.53: 32 – col.54: 38);*

*retrieving a definition of said state of said object (e.g., col.54: 32 – col.54: 38);*

*determining from said definition whether said action is permissible in said state (e.g., col.64: 12-53); and*

*providing a permission status to perform or not perform said action with said object (e.g., col.64: 46 – col.65: 16).*

**Claim 12:**

*Dardinski discloses a computer readable medium having executable instructions stored thereon to perform a method of validating state transitions, said method comprising:*

*receiving a request to make a state transition for an object from a user (e.g., FIG. 45, col.52: 6-60; col.54: 58-64; col.58: 16-23);*

*determining whether said object is checked-in (e.g., col.53: 53 – col.54: 9; FIG. 8);*

*determining whether said user has permission to make said state transition based on a user-defined state transition model (e.g., col.64: 12 – col.65: 16);*

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*permitting said state transition, if said user has permission (e.g., col.64: 12-53); and*

*providing a state transition status (e.g., col.64: 46 – col.65: 16).*

**Claim 13:**

Dardinski discloses *a computer readable medium having executable instructions stored thereon to perform a method of validating a state transition, said method comprising:*

*determining whether a next state in a state transition request from a user is allowed from a current state in said state transition request based on user-defined transition restrictions (e.g. col.64: 12-53);*

*determining whether said user has permission to make said state transition based on user-defined transition restrictions (e.g., col.64: 46 – col.65: 16); and*

*providing a state transition status (e.g., col.52: 6-60; col.64: 46 – col.65: 16).*

**Claim 14:**

The rejection of claim 13 is incorporated. Dardinski also discloses *determining whether said state transition has a restricted signing requirement and, if so, verifying that said restricted signing requirement is met (e.g., col.64: 12-45; col.65: 45-62).*

**Claim 26:**

Dardinski discloses *a source control system for a process control system, comprising:*

*a processor (e.g., FIG. 1, col.8: 23 – col.9: 20);*

*a life cycle process component executable on said processor to enforce compliance with user-defined life cycle states of objects of a control strategy of a plurality of devices of said process control system (e.g., col.52: 6-60; col.54: 58-64; col.58: 16-23);*

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*a version control component executable on said processor to associate a one or more version numbers with said objects (e.g., col.51: 59 – col.52: 14; col.55: 14-63); and*

*a controller in communication with said processor via a network to be loaded with said objects to provide process control of said plurality of devices according to said control strategy (e.g., FIG. 2, col.9: 21-51).*

**Claim 27:**

The rejection of claim 26 is incorporated. Dardinski also discloses *another processor to back-up said processor (e.g., col.8: 23 – col.9: 20).*

**Claim 28:**

The rejection of claim 26 is incorporated. Dardinski also discloses *a state configuration component executable on said processor to receive state information from a user for each state (e.g., col.9: 21-51).*

**Claim 29:**

The rejection of claim 28 is incorporated. Dardinski also discloses *said state information includes a state name and an indication of whether load to controller is allowed from that state (e.g., col. 61: 24 – col.62: 18).*

**Claim 31:**

The rejection of claim 28 is incorporated. Dardinski also discloses *said state information includes an indication of whether restricted signing is needed (e.g., col.64: 12-45; col.65: 45-62).*

**Claim 32:**

The rejection of claim 28 is incorporated. Dardinski also discloses *said state configuration component provides editing functions for said state information (e.g., col.108: 5-15).*



**Claim 33:**

The rejection of claim 26 is incorporated. Dardinski also discloses *a state transition component executable on said processor to receive state transition configuration requirements from a user* (e.g., col.51: 59 – col.52: 14; col.55: 14-63).

**Claim 34:**

The rejection of claim 33 is incorporated. Dardinski also discloses *said state transition configuration requirements include which users have permission to make particular state transitions* (e.g., col.64: 12-45; col.61: 24 – col.62: 18).

**Claim 36:**

The rejection of claim 26 is incorporated. Dardinski also discloses *said version control component provides check-in and check-out functions* (e.g., col.53: 53 – col.54: 38).

**Claim 37:**

The rejection of claim 26 is incorporated. Dardinski also discloses *a change qualification state component to process a qualification state transition request from a user* (e.g., col.64: 12-53).

**Claim Rejections – 35 USC § 103**

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 5, 15, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dardinski in view of US Patent No. 7,000,118 to Murthy et al. (art made of record, hereinafter "Murthy").

**Claim 5:**

The rejection of claim 4 is incorporated. Dardinsky discloses permission (FIG. 61, section 1.10.1.4 and 1.10.2), security (FIG. 58, section 1.10), and audit trail (FIG. 56, section 1.8.4.7), but does not explicitly disclose *electronic signatures*.

However, in an analogous art, Murthy further discloses *electronic signatures* (e.g., col.1: 48 – col.2: 4).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Murthy's teaching into Dardinsky's teaching. One would have been motivated to do so to validate the audit trail as suggested by Murthy (e.g., col.1: 48-67).

**Claim 15:**

Dardinski discloses *a computer readable medium having executable instructions stored thereon to perform a method of validating a state transition of a life cycle process in a source control system, said method comprising:*

*determining whether a current state transition in a state transition request for an object from a user requires a permission (e.g., col.52: 6-60; col.53: 32 – col.54: 64; col.58: 16-23); FIG. 61, section 1.10);*

*allowing said current state transition only if said user has the permission (e.g., FIG. 56, 58 and related text).*

Dardinski does not disclose: *determining whether a current state transition in a state transition request for an object from a user requires an electronic signature based on user-defined transition restrictions of said life cycle process; determining whether a previous state transition for said object required a previous electronic signature, if said current state transition requires a current electronic signature; allowing said current state transition only if said previous electronic signature is different than said current electronic signature; and providing a validation status.*

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However, in an analogous art, Murthy further discloses said limitations (e.g., col.2: 1-21; col.2: 63 – col.3: 2).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Murthy' s teaching into Dardinski' s teaching. One would have been motivated to do so to support the four-eye principle in a secure database system as suggested by Murthy (e.g., col.2: 5-21).

**Claim 35:**

The rejection of claim 33 is incorporated. Murthy further discloses said state transition configuration requirements include an indication of whether an electronic signature is needed to make particular state transitions (e.g., col.2: 63 – col.3: 2).

10. Claims 16-25 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dardinski in view of US Patent No. 6,654,747 to Van Huben et al. (art made of record, hereinafter "Van Huben").

**Claim 16:**

Dardinski discloses *a computer readable medium having executable instructions stored thereon to perform a method of determining a new state for an object version upon check-in, said method comprising:*

*determining whether said object is being checked-in for a first time (e.g., FIG. 8, col.14: 38-65; );*

*a first pre-defined state, if said object is being checked-in for said first time (e.g., col.21: 21-41; col.54: 10-38),*

*wherein a fallback state is a life cycle stage of a qualification process (e.g., col.61: 24 – col.62: 37); and*

*providing said first fallback state, if said object is being checked-in for said first time (e.g., col.54: 5-21 and 58-64).*

Dadinsky does not explicitly disclose *retrieving a first fallback state for a first pre-defined state, if said object is being checked-in for said first time.*

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However, in an analogous art, Van Huben further discloses *retrieving a first fallback state for a first pre-defined state, if said object is being checked-in for said first time* (e.g., FIG. 5A-B, state tables, col.16: 1-41).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Van Huben's teaching into Dardinski's teaching. One would have been motivated to do so to permit alternative techniques for implementing complex application algorithm as suggested by Van Huben (e.g., col.15: 63 – col.16: 12).

**Claim 17:**

The rejection of claim 16 is incorporated. Van Huben further discloses *retrieving a current state for a current version of said object, if said object is not being checked-in for said first time; retrieving a current fallback state for said current state of said object, if said object is not being checked-in for said first time; and providing said current fallback state, if said object is not being checked-in for said first time* (e.g., col.16: 1-41).

**Claim 18:**

Dardinski discloses *a computer readable medium having executable instructions stored thereon to perform a method of processing the addition of a state, said method comprising:*

*receiving a definition of a new state from a user* (e.g., col.14: 38-65; col.21: 21-41; col.7: 12-29),

*a fallback state, wherein said fallback state is a life cycle stage of a qualification process* (e.g., col.54: 5-21; col.54: 58-64; col.61: 24 – col.62: 37).

Dardinsky does not explicitly disclose *said definition including a name and a fallback state; determining whether said name is unique among existing state definitions; validating said fallback state; and adding said definition to a source control system, only if said name is unique and said fallback state is valid.*

However, in an analogous art, Van Huben further discloses said limitations (e.g., col.16: 1-41).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Van Huben's teaching into Dardinski's teaching. One would have been motivated to do so to permit alternative techniques (i.e., state tables with state names, promotion states, and fallback states) for implementing complex application algorithm as suggested by Van Huben (e.g., col.15: 63 – col.16: 12).

**Claim 19:**

The rejection of claim 18 is incorporated. Dardinsky also discloses *said definition includes a restricted signing requirement and further comprising: validating said restricted signing requirement; and wherein said adding said definition to said source control system is performed on an additional condition of whether said restricted signing requirement is valid* (e.g., FIG. 58, 56, 61 and related text).

**Claim 20:**

The rejection of claim 18 is incorporated. Dardinski also discloses *determining whether said user has a privilege to edit said definition; and wherein said adding said definition to said source control system is performed on an additional condition of whether said user has said privilege* (e.g., security, section 1.10; permission, section 1.10.1.4).

**Claim 21:**

Dardinski discloses *a computer readable medium having executable instructions stored thereon to perform a method of processing the modification of a state, said method comprising:*

*receiving a modified definition of a state from a user, wherein said fallback state is a life cycle stage of a qualification process* (e.g., col.52: 6-60; col.53: 32 – col.54: 64; col.58: 16-23).

Dardinski does not explicitly disclose *said modified definition including a name and a fallback state, determining whether said name is unique among existing state*

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*definitions; validating said fallback state; and updating said modified definition in a source control system, only if said name is unique and said fallback state is valid.*

However, Van Huben further discloses said limitations (e.g., col.16: 1-41).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Van Huben's teaching into Dardinski's teaching. One would have been motivated to do so as set forth in claims 16 and 18 above.

**Claim 22:**

The rejection of claim 21 is incorporated. Dardinski also discloses *said definition includes a restricted signing requirement and further comprising: validating said restricted signing requirement; and wherein said updating said modified definition in said source control system is performed on an additional condition of whether said restricted signing requirement is valid* (e.g., security, section 1.10; permission, section 1.10.1.4).

**Claim 23:**

The rejection of claim 21 is incorporated. Dardinski also discloses *determining whether said user has a privilege to edit said definition; and wherein said updating said modified definition in said source control system is performed on an additional condition of whether said user has said privilege* (e.g., FIG. 56 and related text).

**Claim 24:**

Dardinski also discloses *a computer readable medium having executable instructions stored thereon to perform a method of processing the deletion of a state, said method comprising:*

*a state definition* (e.g., FIG. 45, col.52: 6-60; col.53: 32 – col.54: 64);

*objects in said source control system have a current state equal to said state* (e.g., FIG. 1; col.8: 23 – col.9: 20; FIG. 2, col.9: 21-51).

Dardinski does not explicitly disclose: *receiving a request to delete a state definition for said state from a user; determining whether said state definition is*

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*referenced by any other state definition in a source control system; determining whether any objects in said source control system have a current state equal to said state; deleting said state definition from said source control system, only if said state definition is not referenced by any other state definition in said source control system and no objects in said source control system have said current state equal to said state.*

However, in an analogous art, Van Huben further discloses said limitations (e.g., FIG. 5A-B, state tables, col.16: 1-41).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Van Huben's teaching into Dardinski's teaching. One would have been motivated to do so as set forth in claims 16 and 18 above.

#### **Claim 25:**

The rejection of claim 24 is incorporated. Dardinski also discloses *determining whether said user has a privilege to delete said definition; and wherein said deleting said state definition from said source control system is performed on an additional condition of whether said user has said privilege* (e.g., security, section 1.10; permission, section 1.10.1.4).

#### **Claim 30:**

The rejection of claim 28 is incorporated. Dardinski also discloses *said state information includes a fallback state* (e.g., col.61: 24 – col.62: 37; col.54: 5-21).

### **Conclusion**

11. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone is (571) 272 8570. The examiner can normally be reached on Tuesday, Thursday, and Friday from 6:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.


The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

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Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao



TUAN DAM  
SUPERVISORY PATENT EXAMINER